

Amendments to the Claims

The listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims

Claim 1: (previously presented) A portable 2-way secure purchasing aid logistics appliance, comprising:

means for inputting information;

a central processor coupled to said means for inputting information to generate a shopping list, wherein said central processor includes application software to maintain a budget and to perform finance computations and to track financial accounts;

a secure memory coupled to said central processor to safeguard personal and financial information;

means for outputting said shopping list, and said personal and said financial information;

and

a display to view said shopping list.

Claim 2: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 1 further comprising:

a plurality of antennas capable of enabling non-interfering and secure communications between the purchasing aid logistics appliance and a merchant's computer for a plurality of simultaneous signals, the merchant's computer capable of enabling each of said plurality of antennas independently based on the location of the purchasing aid logistics appliance with respect to said plurality of antennas,

wherein said means for inputting information is a radio receiver capable of receiving signals based on the location of said radio receiver with respect to said plurality of antennas, from a radio transmitter coupled to the merchant computer through said plurality of antennas,

wherein the merchant computer transmits product information in response to a signal by said purchasing aid logistics appliance for product information.

Claim 3: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said means for inputting information is an internet port, said internet port is connectable to a personal computer linked to a merchant web site, whereby the merchant web site downloads product information to said internet port in response to a signal by the personal computer for product information.

Claim 4: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said means for inputting information is a bar code scanner, whereby said bar code scanner scans print media bar codes having product information and generates bar code signals to said central processor for further processing.

Claim 5: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 4 wherein said central processor compares said shopping list to said bar code signals to determine whether product is a new product to add to said shopping list or an existing product, whereby said central processor tracks the total cost of products scanned, the remaining products to be scanned, and the available funds remaining in the budget.

Claim 6: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 4 wherein said central processor includes executable software to convert bar code signals into a web page to be displayed on said display.

Claim 7: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 6 wherein said executable software includes:

a decoder having at least one decode table, said decoder capable of interpreting, according to the at least one decode table, a bar code capable of representing a display in one of a plurality of computer languages, said decoder capable of providing parsing information from the interpreted bar code;

a parser capable of creating display executable code to build the display from said parsing information; and

a display browser capable of creating a web page from said display executable code.

Claim 8: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said means for inputting information is a keypad to input product information, personal information, and financial information.

Claim 9: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said means for inputting information is a magnetic stripe reader.

Claim 10: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said secure memory includes encryption circuitry.

Claim 11: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said central processor transmits a first signal to said means for outputting, whereby said means for outputting transmits said first signal to a merchant computer.

Claim 12: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 11 wherein said first signal comprises a credit card number and personal identification number, said personal identification number capable of being a basis for unlocking said secure memory.

Claim 13: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 11 wherein said first signal comprises said shopping list.

Claim 14: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 11 wherein said first signal comprises a debit card number and personal identification number, said personal identification number capable of being a basis for unlocking said secure memory.

Claim 15: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said means for outputting includes a radio transmitter.

Claim 16: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 15 wherein said means for outputting controls signal strength to communicate with a merchant sales register to minimize the possibility of transmission interception during a purchase transaction.

Claim 17: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 10 wherein said central processor further includes executable software to compare smart card information and user personal identification number to data stored in a smart card and said central processor to prevent unauthorized use of said portable 2-way secure purchasing aid logistics appliance, wherein said data stored on the smart card is read from a smart card reader integrated with said purchasing aid logistics appliance.

Claim 18: (previously presented) A method for using a purchasing aid logistics appliance, comprising the steps of:

- downloading product data from a web site;

- creating a shopping list from the product data;

- monitoring beacon channels;

- receiving into the purchasing aid logistics appliance a channel indication of a first wireless channel from the beacon channels;

- uploading the shopping list to a merchant computer from the purchasing aid logistics appliance through the first wireless channel while traversing a doorway into a merchant facility, the first wireless channel directly connecting the merchant computer with the purchasing aid logistics appliance;

- receiving product data into the purchasing aid logistics appliance from the merchant computer through the first wireless channel while traversing a doorway into the merchant facility;

- scanning a product bar code when a product is removed from the shelf and placed in a shopping cart for purchase;

- creating a shopping cart file when the product is scanned; and

- transmitting the shopping cart file to the merchant computer to checkout.

Claim 19: (previously presented) A purchasing aid logistics appliance comprising,

- means for creating a shopping list outside a merchant facility;
- a secure memory;
- means for storing said shopping list and user personal information in said secure memory;
- means for automatically uploading said shopping list to a merchant computer upon entry into the merchant facility;
- means for two-way data and voice communication with the merchant computer;
- means for displaying said shopping list;
- means for optically inputting product information data;
- means for electronic payment; and
- means for calculating total price of items selected.

Claim 20: (cancelled)

Claim 21: (previously presented) A portable 2-way secure purchasing aid logistics appliance comprising:

- means for inputting information;
- a central processor coupled to said means for inputting information to generate a shopping list, wherein said central processor includes application software to maintain a budget and to perform finance computations;
- means for encrypting memory coupled to said central processor to safeguard personal and financial information;
- means for outputting said shopping list, and said personal and said financial information;
- and
- a display to view said shopping list.

Claim 22: (previously presented) A method for using a purchasing aid logistics appliance, comprising the steps of:

- accessing a bar coded advertisement having enough information to represent a web page;
- downloading product data from the bar coded advertisement;

creating a shopping list from the product data;
monitoring beacon channels;
receiving a channel indication of a first wireless channel from the beacon channels;
uploading the shopping list to a merchant computer through the first wireless channel
while traversing a doorway into a merchant facility;
receiving updated product data and personal preference data from the merchant computer
through the first wireless channel while traversing a doorway into the merchant facility;
scanning a product bar code when a product is removed from the shelf and placed in a
shopping cart for purchase;
creating a shopping cart file when the product is scanned;
transmitting the shopping cart file through a second wireless link to the merchant
computer in order to checkout; and
releasing the first wireless channel while traversing a doorway out of the merchant
facility.

Claim 23: (previously presented) The method as defined in claim 22 further comprising the step
of:

identifying the product data with a merchant according to the bar coded advertisement.

Claim 24: (previously presented) The method as defined in claim 22 further comprising the steps
of:

downloading at least one price associated with the product data;
verifying the validity of the at least one price; and
synchronizing appliance financial transaction logs with financial institution financial
transaction logs.

Claim 25: (previously presented) The portable 2-way secure purchasing aid logistics appliance
according to claim 1 further comprising:

a secure trusted monitor program capable of managing the execution of software in said appliance; and

a secure boot program capable of booting said appliance and initiating said secure trusted monitor program.

Claim 26: (cancelled)

Claim 27: (cancelled)

Claim 28: (previously presented) A portable 2-way secure purchasing aid logistics appliance, comprising:

means for inputting information;

a central processor coupled to said means for inputting information to generate a shopping list, wherein said central processor includes application software to maintain a budget and to track financial accounts;

means for modifying memory coupled to said central processor to safeguard personal and financial information, said means for modifying memory requiring an authentication procedure to reverse the modification; and

means for outputting said shopping list, and said personal and said financial information.

Claim 29: (cancelled)

Claim 30: (previously presented) A portable 2-way secure purchasing aid logistics appliance, comprising:

means for inputting information, said information including a shopping data, personal data, and financial data;

a central processor coupled to said means for inputting information to generate a shopping list from said shopping data, wherein said central processor includes application software to maintain a budget and to perform finance computations and to track financial accounts based on said personal data and said financial data;

a secure memory coupled to said central processor to safeguard said personal data and said financial data;

means for performing access control capable of granting or denying access to said secure memory;

means for outputting said shopping list, said personal data and said financial data; and a display to view said shopping list.

Claim 31: (currently amended) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said secure memory comprises:

an address decoder;

means for misaligning the address of a memory location by a random number incorporated into said address decoder; and

means for accessing said memory location by said address decoder by using said random number when a secure address range is accessed in secure mode.